

Title (en)

INSULATION DETECTION CIRCUIT, DETECTION METHOD, AND BATTERY MANAGEMENT SYSTEM

Title (de)

ISOLATIONSDETEKTIONSSCHALTUNG, DETEKTIONSVERFAHREN UND BATTERIEVERWALTUNGSSYSTEM

Title (fr)

CIRCUIT DE DÉTECTION D'ISOLATION, PROCÉDÉ DE DÉTECTION ET SYSTÈME DE GESTION DE BATTERIE

Publication

**EP 3451005 A2 20190306 (EN)**

Application

**EP 18190242 A 20180822**

Priority

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Abstract (en)

An insulation detection circuit, detection method, and battery management system are disclosed in the present disclosure. The insulation detection circuit includes a positive sampling unit (F1), a negative sampling unit (F2), a positive sampling point (S1), a negative sampling point (S2), a reference voltage terminal (GND), and a processor (C1). A first end of the positive sampling unit (F1) is connected with positive electrode of the power battery pack to be measured. A second end of the positive sampling unit (F1) is connected with the reference voltage terminal (GND) and the positive sampling point (S1). A first end of the negative sampling unit (F2) is connected with negative electrode of the power battery pack to be measured. A second end of the negative sampling unit (F2) is connected with the reference voltage terminal (GND) and the negative sampling point (S2). The processor (C1) is connected with the positive sampling point (S1) and the negative sampling point (S2). The processor (C1) is configured to obtain a positive insulation resistance value and a negative insulation resistance value of the power battery pack to be measured based on the positive sampled signal and the negative sampled signal. The insulation detection circuit provided in the embodiments of the present disclosure may improve the detection accuracy of the insulation resistance values of the power battery pack. [FIG. 1]

IPC 8 full level

**G01R 31/36** (2019.01); **G01R 27/02** (2006.01)

CPC (source: CN EP US)

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Cited by

EP4052954A1; EP3617719A1; US11085960B2

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